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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/850,263	05/07/2001	Jennifer A. Jacobi	AMAZON.008C1	1552

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EXAMINER

CHAMPAGNE, DONALD

ART UNIT	PAPER NUMBER
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3622

DATE MAILED: 09/30/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/850,263

Applicant(s)

JACOBI ET AL.

Examiner

Donald L. Champagne

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 33-54 is/are allowed.
- 6) ☒ Claim(s) 1-12, 14-28 and 30-32 is/are rejected.
- 7) ☒ Claim(s) 13 and 29 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102 and 35 USC § 103***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 5, 7-9, 14, 15, 17, 18, 21, 23-25, 30 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Whiteis.
4. Whiteis teaches (independent claims 1 and 17) a method and system for recommending items to users from a database of items, the method comprising: providing a table (*LINKS table 301*) that maps items from the database to respective sets of similar items, wherein the table includes values (*Link Weight 304*) that indicate degrees of similarity between specific items, said values reflecting an automated analysis of historical data (col. 2 lines 2-3) indicating item interests of each of a plurality of users (col. 3 lines 43-51); and identifying multiple items selected by the target user (col. 3 lines 39-42); and selecting similar items (*Result Item 402*) from the table to recommend to the target user such that a determination of whether to recommend a particular similar item takes into consideration a degree to which that similar item is similar to each of the multiple items selected by the target user (the *LinksTo Weight 353*), as indicated by the table (col. 3 lines 52-64).

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5. The reference also teaches at the citations given above claims 2 and 18; 7 and 23 (inherently, from the similarity definition of *Link Weight 304*); 8, 9, 24 and 25; and 15 and 31 (inherently, because all content is downloadable).
6. The reference also teaches claims 5 and 21 (col. 3 lines 23-26),
7. Claims 3, 4, 6, 10-12, 16, 19, 20, 22, 26-28 and 32 are rejected under 35 U.S.C. 103(a) as being obvious over Whiteis.
8. Whiteis does not teach (claims 3, 4, 10, 19, 20 and 26) an electronic shopping cart. The reference does teach the genus "items that the user chooses, knows he likes, and may want to purchase" (col. 3 lines 14-15 and col. 2 lines 23-26), which would strongly suggest the specie "electronic shopping cart" to one of ordinary skill in the art, at the time of the invention. The reference also does not teach (claims 6 and 22) that the items were selected by the target user through online browsing. Because virtually all shopping entails some browsing, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to add the selection of items by online browsing to the teaching of Whiteis.
9. Whiteis does not teach (claims 11 and 27) not recommending items already purchased. Because there would be no point in recommending items already purchased, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to not recommending items already purchased.
10. Whiteis does not teach (claims 12 and 28) further determining similarity by content analysis of item descriptions. Because content analysis is well known for similarity determination and could provide marginal advantages, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to further determining similarity by content analysis of item descriptions.
11. Whiteis does not teach (claims 16 and 32) that the table is stored as a B-tree data structure. Because it is a well-known structure providing efficient lookup, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to store the table as a B-tree data structure.

***All wabl Subject Matter***

12. Claims 13 and 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
13. Claims 33-54 are allowed.
14. The following is an examiner's statement of reasons for the suggestion of allowable matter and allowance.
15. The closest prior art, Whiteis, does not teach or suggest generating recommendations in real time (claims 13 and 29). The closest prior art teaching a real time recommendation is Bieganski (col. 7 lines 14-15), but Bieganski so differs from Whiteis as to offer no obvious means by which the Whiteis invention can be made to deliver recommendations in real time.
16. For independent claims 33 and 48, the closest prior art are applicants' US patents 6,266,649 B1 and 6,317,722 B1, over which an obviousness double patenting rejection was made and a satisfactory terminal disclaimer has been filed.
17. The closest foreign patent prior art is Lashkari et al., EP 0 751 471 A1. It does not teach or suggest: a table including values indicating the similarity or relatedness between specific items (independent claims 1 and 17); indicating a frequency with which each pair of items occurs within a same user-specific history (independent claim 33); and recommending an item based on the similarity of that item to more than one of the plurality of items in an electronic shopping cart (claim 48). In short, the instant invention recommends an item based on its similarity to other items. Conversely, the reference recommends an item to a user based on that user's similarity to other users.
18. The closest non-patent prior art is Faloutsos and Oard, "A survey of information retrieval and filtering methods", which teaches recommending an item (a document) based on its similarity to other items. (This document is undated, but refers to a 1983 text for the pertinent material.) However, the reference does not teach or suggest recommending an item based on its similarity/relatedness to each of multiple items selected by a user (independent claims 1 and 17); a table comprising the frequency with which each pair of items in the table occurs within a same user-specific history (independent claim 33); and

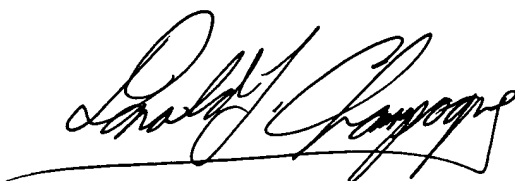
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recommending an item based on the similarity of that item to more than one of the plurality of items in an electronic shopping cart (claim 48).

19. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

**Conclusion**

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald L. Champagne whose telephone number is 703-308-3331. The examiner can normally be reached from 6:30 AM to 5 PM ET, Monday to Thursday. The examiner can also be contacted by e-mail at [donald.champagne@uspto.gov](mailto:donald.champagne@uspto.gov), and *informal* fax communications may be sent directly to the examiner at 703-746-5536.
21. The examiner's supervisor, Eric Stamber, can be reached on 703-305-8469. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9326 for regular official communications and 703-872-9327 for After Final official communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-5771.



Donald L. Champagne  
Examiner  
Art Unit 3622

25 September 2002